

DAIRY FACTS

GIVE COW NUTRITIOUS FEEDS

Pennsylvania Experiment Station Recommends Decrease in Silage in Drying-Off Process.

For a considerable period before the dairy cow is due to freshen it is best to feed highly nutritious feeds. About 60 days before the time for parturition the cow should be dried off. It is necessary that this be done carefully, as old milk left in the udder may lead to garget or other ills.

For the drying-off process the Pennsylvania experiment station recommends decreasing the silage to about 20 pounds and the grain to four pounds daily. No change is necessary in the amount of hay fed. After the cow is dry the grain ration is resumed and the amount of grain increased gradually until the week just previous to freshening.

The grain ration ought to be laxative in character, highly nutritious and palatable. During the last week the cow should be placed in a box stall and her grain lessened. Equal parts of wheat bran and ground oats or chop with alfalfa hay and mangelis is recommended as a good ration to feed at this time.

After parturition the cow should not be milked until the second day, except by the calf, unless, as is the practice of some dairymen, the calf is removed at once. For several days the cow should be allowed only tepid water. For feed, good clover hay, mangelis and bran and oats are probably best until her system becomes normal again. By the third day the cow may be returned to her stall.

KEEP DAIRY PRODUCTS COLD

Special Precautions Should Be Taken to Cool Milk After Being Drawn and Then Kept So.

Milk and cream are perishable products and every possible precaution should be taken at the farm and in the home to keep these products wholesome. In the fall with the cooler weather, there exists an opinion that ice or other methods of cooling milk and cream is unnecessary to have these products remain sweet in cold weather, says Prof. V. R. Jones of the South Dakota department of dairy husbandry. This is a false assumption.

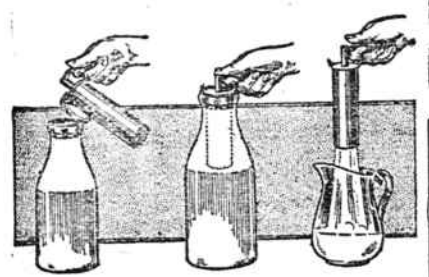
Special precautions to see that these dairy products are cooled immediately after drawn and kept cold until delivery are important. Milk and cream will contain germs or (bacteria) which no matter how careful we are in its production. The bacteria that cause milk to sour multiply very rapidly at moderately high temperatures (70-80 degrees F.). If the milk or cream is cooled to 50 degrees F. or less, the growth of these germs is held in check and these food products remain sweet for a longer period.

If the dairy farmer does his duty in properly cooling milk and cream at the farm, either with ice or cold running water, and the same precautions are taken in the home, there will be less trouble with sour milk and cream.

REMOVE CREAM FROM BOTTLE

Simple Utensil With Which Cream May Be Taken From Milk Bottle Without Mixing Milk.

A utensil for removing cream from a milk bottle consists of a cylinder about half the length of a quart bottle and of a diameter slightly less than that of the mouth of the ordinary milk container. The device is held in one hand, the index finger passing through a small looped handle at the upper end. Projecting from the otherwise closed



Cream Separator.

upper end of the cylinder is a small tube. A screen extends across the cylinder's lower end. After inserting the separator into the bottle to the depth of the cream, the thumb is placed over the end of the tube. The separator may now be lifted from the bottle filled with cream, the screen and suction combining to keep the fluid from flowing downward.—Popular Mechanics Magazine.

CLEANLINESS OF CALF PENS

Use Abundance of Nice Straw and Dig Out All Manure Frequently—Calves Are Frisky.

The calf pen must be kept clean. Use lots of nice straw, not putting it upon a lot of fermented filth, but dig out all manure very frequently and add fresh straw almost daily. Calves are so frisky that they tramp the straw into the manure to beat everything.

Separator milk, tender clover or alfalfa hay, bran, oil meal, silage, shelled corn, such feeds are the stuff good calves are made of.

YOUR NAME

Is it on our subscription list?

We will guarantee you full value FOR YOUR MONEY

WILL BE NO LET UP IN W. S. S. DRIVE

Active Canvass Now Being Waged Throughout Virginia To Form Hundreds Of War Savings Societies—All Must Help.

Although the War Savings pledge campaign is now a thing of the past there is no diminution in the cities, towns and villages throughout Virginia in the matter of the formation of War Savings Societies.

With this in mind, workers during the campaign just closed are still making canvasses of the various offices and large institutions in the hope of forming at least several hundred societies a month. While the work in the last campaign was the most complete that was ever accomplished, there still remains a number of people who were not canvassed and asked to sign pledges. Of this number, a large share reported at the school house meetings and subscribed at that time, while others were out-of-town, and did not receive their notification cards. Of the latter, large numbers have been reporting at headquarters of their communities and have signed up there, the pledge cards requested by Uncle Sam.

All these pledge cards that were registered are now being posted in ledgers and will, when completed be sent to the authorities at Washington, to be kept for future use. What this use will be, only Uncle Sam can tell—he will decide for himself, just what steps to take with the slackers who could subscribe—and did not.

Just a short time is left in which pledge cards may be registered—it would be well to look after it immediately—and if possible, if you have not already joined a society, do so.

W. S. S.

The less the American people save the less money, labor, ships and materials there will be for war purposes.

W. S. S.

Never forget the investment features of War Savings Stamps. When you buy them you become a stockholder in the United States, the best corporation in the world.

W. S. S.

To achieve victory we must have two armies: One that fights; one that saves. Every patriot will be a member of one of these armies.

W. S. S.

Both you and the Government cannot use the same labor and materials.

W. S. S.

The Army and Navy take chances. You don't, if you buy War Savings Stamps.

W. S. S.

W. S. S. Booths At Hotels.

Through the efforts of J. T. McAllister, director of hotel activities of the National War Savings Committee of Virginia, numerous hostilities in the State have opened booths for the sale of War Savings Stamps. Some of the hotels which have agreed to open booths as a part of their contribution to patriotic war service are as follows: Lynchburg, Virginia and Carroll; Roanoke, Roanoke and Ponce de Leon; Old Point Comfort, Chamberlin; Hot Springs, War Springs Hotel; Buchanan, Central; Norfolk, Lorraine; Staunton, Beverley; Radford, Hotel Radford; Altavista, Commonwealth.

Mr. McAllister has announced that other hotels have voiced their willingness to install W. S. S. booths and are now engaged in having them built.

W. S. S.

There Was A Man In Our Town.

By Gettelle Burgess, Of The Vigilantes.

There was a man in our town And he was wondrous wise; He took his change in War Thrift Stamps.

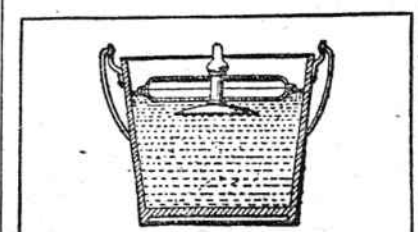
The twenty-five cent size. And when he found what Thrift would do

With all his might and main, He bought some more Thrift Saving Stamps. Again, again, again!

CALF-FEEDER IS ARTIFICIAL

Combination Pacifier and Nurse Bottle Attachment for Milk Pails Is Shown in Drawing.

Who has not more than once angrily kicked a calf "in the slats" while trying to teach it to take its liquid dinner from a pail instead of from its mother's udder in nature's well approved manner? But the new efficiency movement in the business of farming has approved the artificial method of feeding the calves so as to increase the income to be obtained from milking their mothers. Some ingenious son of a farmer seems to have set himself the task of devising some method of making the calf want to drink from the



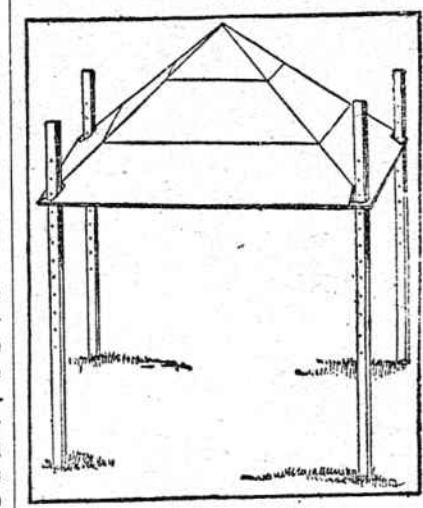
New Calf-Feeder.

pail rather than simply, and more or less forcibly, making him drink from it. The result of that thinking is the combination pacifier and nurse bottle attachment for milk pails shown in the accompanying drawing. It consists of a metal float carrying a teatlike attachment on which may be placed a rubber nipple. This arrangement lets the calf butt and suck all it wants to, but still forces it to draw its nourishment from the pail instead of from the maternal udder. All you have to teach it is to stick its nose downward instead of upward in order to get hold of the nourishing teat.—Farming Business.

HAY STACK ROOF IS MOVABLE

Covering Arranged In Such Manner That It Can Be Raised or Lowered as Desired.

In response to a query for a hayshed roof that can be raised or lowered a writer in The Farmer makes the following reply: "We have two of them 18 feet square, and they are perfectly satisfactory. The roof must be made so as



Removable Roof.

to admit the posts at the corners, as in the cut. The poles should be cut about 22 feet long and set in the ground about four feet, leaving 18 feet above the ground. Holes should be bored in the posts a foot apart as high as the roof should go, and then one can raise the roof as high as he wants it. Of course, there is no use in having it any higher than one can pitch the hay, but the roof must be raised up high enough to work under while putting in the hay. When raising or lowering, iron pins are placed in the holes to hold the roof. We bored one inch holes. The posts should be quite heavy, say about nine inches at the butt. We use a tackle to raise ours, one corner at a time, and keep going around until it is as high as one wants it.

FACTORS FOR FERTILE SOIL

Must Be Sweet, Not Acid, and Well Supplied With Organic Matter to Produce Big Crops.

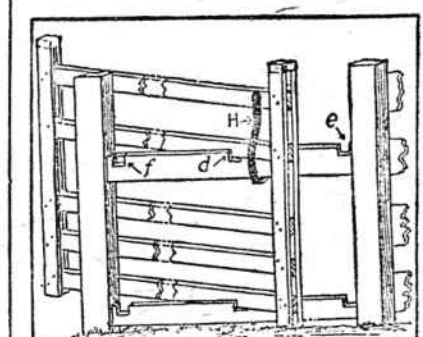
A fertile soil must be sweet, not acid, and well supplied with organic matter and humus. It must have a suitable texture and tilth—a favorable environment for the plant roots. The soil must be aerated and have a sufficient supply of soil moisture, which includes proper tillage, irrigation and drainage. All of these factors and others must be associated in a systematic plan of soil management in order that the land may be fertile and produce large crops.

COMBINATION GATE IS HANDY

Barrier of Original Design Is Convenient and Time-Saving—Arranged for Hogs.

The cut herewith shows a combination gate of my own design that I think is quite handy, convenient and time saving. It is located between the barnyard proper and the hog yards. It is necessary to have a large sliding gate between the yards in order to pass from one yard to the other with team and wagon or manure spreader, writes J. A. Saul of Hancock county, Ohio, in Ohio Farmer. Also I wanted a place for the hogs to pass through which I could open or close at will. Since there was only room for the large gate and not wishing to weaken it by cutting a hog door in it I devised this plan.

It is easily constructed. Simply set two posts three feet apart and bolt two 2 by 6 inch cross-pieces to them, one two feet or more above the other, above the one on the ground. These must be notched as shown to hold the gate where wanted. When the gate is in the notch D, the hog door is open. In notch E hog door is



Combination Gate.

shut and when in notch F door is partly open to allow only smaller hogs to pass through.

To prevent "smart" old hogs from raising gate from one notch to another bolt strap iron H to top board an inch or so in front of cross pieces on which gate is hung. This iron must be bent in hook shape and be just long enough so that the hook end will slip in under the top cross-piece when gate is dropped in any of the notches. The posts must be set at an angle to the large gate so same can be opened wide enough to be useful.

SIZE OF DAIRYMAN'S INCOME

Noticeable Increase Where Purebred Bulls Are Maintained—Scrubs Do Not Pay for Keep.

Figures recently compiled by the University of Illinois seem to show that there is a definite relation between a good bull and the size of the dairyman's income.

On 124 dairy farms where purebred bulls were kept at the head of the dairy herd, the average farm income was \$1,102 after deducting the taxes, interest on investment, etc.

On 466 dairy farms where a grade bull stood at the head of the herd the farm income was found to be \$784 per year, and on 83 farms where scrub bulls were used the farm income was \$243, or failed by \$243 to pay interest on the investment, to say nothing about pay for the owner's time.

OLEY'S HONEY AND TAR
cures the cough and heals lungs

FEDERAL FOOD ADMINISTRATION FOR VIRGINIA

Information and Rulings

RESULTS FIRST YEAR OF FOOD ADMINISTRATION

(Preliminary work began May 19, 1917 Food Control Act passed Aug. 10, 1917)

WHEAT EXPORTS (since July 1):

Estimated surplus for export 20,000,000 bushels

Actual shipments to June, 120,000,000 bushels

BEEF EXPORTS:

Ordinary rate one to two million pounds monthly

Largest single month this year, 87,000,000 lbs.

PORK EXPORTS:

Ordinary rate, 50,000,000 pounds monthly

Largest month this year, 308,000,000 lbs.

PRICE OF FLOUR (Minneapolis):

One year ago, \$18.75 a barrel wholesale

Present price, \$20.90 per barrel

PRICE MARGIN (between farmer's wheat and flour made from it):

One year ago the difference was \$5.68

Present date the difference is 64 cents

IN GENERAL: To the farmer going to market, 27 per cent. more than last summer; to the housewife buying in market, 13 per cent. less than last summer

AND THE ALLIES HAVE BEEN SUSTAINED

SUGAR.

A number of causes have conspired to make our sugar position more difficult than we could have anticipated at the beginning of the year. Among these causes are:

Increased shipping needed by our growing army in France.

Certain West Indian Islands and other accessible sugar producing areas have proved a less yield than was anticipated.

The domestic beet and Louisiana crops have fallen below anticipation. There has been some destruction of beet sugar factories in the battle area of France and Italy.

We have lost considerable sugar by submarines.

A close estimate indicates a reasonable expectation from all sources of about 1,600,000 tons of sugar for United States consumption during the last half of 1918.

This 1,600,000 tons necessitates a considerable reduction in our consumption. It will require 1,500,000 tons for six months to meet the following needs:

To provide three pounds of sugar per month per person for household use.

To take care of our Army and Navy.

To provide for the necessary preservation of fruit, milk, etc. etc.

This conservation program means that for household use, together with the special allowance for home canning, a reduction of 25 per cent. from normal, but that is nearly double the ration in the Allied countries.

Retailers must not sell sugar to any except households and boarding houses feeding less than twenty-five persons without taking up the certificates of such persons. They must not sell more than two pounds at any one time to any town customer, or more than five pounds at any one time to any country customer. The retailer will do his best not to sell more than three pounds per person per month to households, whose cooperation with the retailer is earnestly sought.

Retailers may as at present sell 25 pounds of sugar to any one household for home canning upon the household's certifying that he has not bought elsewhere and agreeing to return any balance unused for this purpose. The household can obtain more than 25 pounds upon approval of local administrator, if supplies are available.

It will be seen that there is no direct rationing of the household. It would cost the Government \$5,000,000 to put the household on a ration card and would take the services of 100,000 people to take care of the work entailed. We cannot afford the labor or money and if householders will cooperate it can be avoided.

POULTRY AND EGGS.

A retail merchant who buys eggs or takes them in trade and sells them at retail; that is, direct to the consumer, is not required to be licensed. If he sells the eggs so purchased to another dealer, he is required to be licensed.

Applications for licenses should be made direct to the Law Department—License Division United States Food Administration, Washington, D. C.

There is no fee or cost to the licensee for such licenses.

TREAT CALVES TWICE YEARLY

Don't Wait Until Animals Commence to Die of Blackleg Before Administering Treatment.

(By G. H. GLOVER, Colorado Agricultural College, Fort Collins.)

Calves should be vaccinated for blackleg twice a year, making it a regular chore, and do not wait until they begin to die before getting ready.

The period of ordinary susceptibility ranges from three months to two and one-half years. Most of the vaccine on the market is reliable and the unsatisfactory results are usually due to carelessness on the part of the farmer in not following directions in using it.

The agricultural college distributes the government blackleg vaccine free to farmers of Colorado. Orders for vaccine will not be filled promptly, however, unless the applicant states that he has a vaccinating outfit, which is very necessary to administer vaccine in this form. A pellet injector will not do, neither will a hypodermic syringe, without the remainder of the outfit, for placing the vaccine in solution.

MUST LIVE UP TO W. S. S. PLEDGES

Systematic Purchase Of Stamps Will Help Virginians To Fulfill Promises To Government—How War Savings Societies Operate.

It is now the patriotic duty of all Virginians who signed pledge cards promising to invest certain sums in War Savings Stamps before the close of the year to see that their vows are made good. The best way to do this is to figure how to reach the total pledged by weekly or monthly purchases. This will not only insure the investment of the sums pledged, but will accomplish the purpose through systematic saving, which is one of the principal aims of the great thrift movement, which was inaugurated by the United States Government to help finance the war and at the same time to educate spend-thrift Americans in the habit of economy.

In a letter to State Director Thomas B. McAdams, Bishop D. J. O'Connell, head of the Catholic Church in Virginia, expresses his opinion on this subject as follows:

"It seems to me that one of the very best ways of teaching our children lessons of thrift and of patriotism at the same time is to train them to the habit of buying War Savings Stamps, and we all know that example is the best way of teaching. By promoting this movement we help our country and our children at the same time."

War Savings Societies.

With the intensive drive of June a thing of the past, the National War Savings Committee of Virginia is now entering most of its activities on War Savings Societies. In this connection Eugene R. Jones, State Director of War Savings Societies, said:

"The primary idea of a War Savings Society is to foster and stimulate the savings habit among its members, and to invest the money saved in Thrift and War Savings Stamps. You see, the idea is that the society is a purchasing agency, not a selling agency and the direct duty of its members is the accumulation of War Savings Stamps, but of course this is not meant to imply that they should in any way curtail their activities if engaged also in the sale of stamps."

"It is very obvious that a group of people associated together with a definite aim and common purpose, can accomplish more than the same number of individuals working independently. Hence the War Savings Society."

"The aim and purpose of the present Thrift Campaign is clearly expressed in the pledge which each person signs (he wishes to become a member of a society, and with the knowledge of its significance thus obtained he becomes an integral part of a vast machine for turning out unlimited thrift, hence the pledge."

"To co-ordinate and direct this movement the National War Savings Committee has provided that each society organized in accordance with its very simple requirements shall be directly affiliated with it, somewhat in the nature of a sub-committee of the whole United States Government, and requires the organization in a concrete form by giving a certificate to that effect. Hence the charter."

"It is an honor to be an enlisted member of any organized society for saving, thrift and economy, and in recognition of this the United States Government has provided a distinctive badge for all who serve their country in this way. Hence the button."

"Don't forget the pledge you signed when you enlisted. Be loyal and active under the charter that recognizes your society as a part of the Government machinery for winning the war, and on can wear your button honorably and proudly."

W. S. S.

To the little town of Windsor, Isle of Wight county, belongs the distinction of being the first in Virginia to go over the top." Announcing this act, State Director McAdams received the following telegram from Director Followay, of Isle of Wight: "Town of Windsor has gone over the top, buying her quota War Savings Certificates."

W. S. S.

Make Thrift your by-word.

W. S. S.

Saving is not sacrificing.

W. S. S.

Labor and material are essential to victory; use both sparingly.

W. S. S.

Many are giving their lives; you are asked only to save your money.

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DAIRY



POINTS OF IDEAL DAIRY COW

Excellent Hints Given Which May Help Farmer in Selecting Animal for His Herd.

In selecting cows for dairy herds there are several essential points to consider.

The cow should have great stomach capacity; avoid a round bodied cow whose ribs are short, and a flat-ribbed cow. There should be ample room for the udder, which should extend well forward and not hang down. The

Illustration Given Herewith Shows How One of Standard Milk Machines Is Operated.



Machine in Operation.

IDEAL DAIRY COW.

The dairy cow should be deep and wide from 1 to 2 as this gives her large capacity for rough feed. The back from 1 to 4 should be sharp, with little flesh, when she is in good condition. She should be well cut up behind so that the udder can extend well up, as at 3. Her flank should be well arched, as at 5, to provide room for a large udder.

milk veins should be large and the farther they go the better. The udder should be loose and pliable, when empty—not fleshy.

The eyes should be large and bright and project well out from the face. This is a strong indication of the nerve force needed for strong digestion and large milk secretion.

LACK OF SHELTER FOR COWS

Exposure to Cold Rains Causes Big Drop in Milk Production—Cleanliness Is Important.

(By C. H. ECKLES, Missouri College of Agriculture.)

The dairy cow often suffers the most from exposure to the weather before real winter has begun. After steady cold comes the cow is generally stable. Exposure to cold rains is often more injurious to the animal than the colder but dry weather in winter.

The dairy cow is not like the fat steer, protected from cold by a layer of fat. As a result, bad weather causes a big drop in milk production. So long as the weather is dry it is just as well to leave the cow outside nights, but every cold rain should find her protected.

It is not necessary in the climate of Missouri to go to any great expense on most farms in order that the barn may be warm. The main thing is to have tight walls so there is no draft or wind, and a good roof. Care should be taken in arranging the stalls in the form of a platform of the right length and a gutter of sufficient depth to hold the manure. The cleanliness of the milk depends to a considerable extent upon having the barn built so the cow will keep herself clean